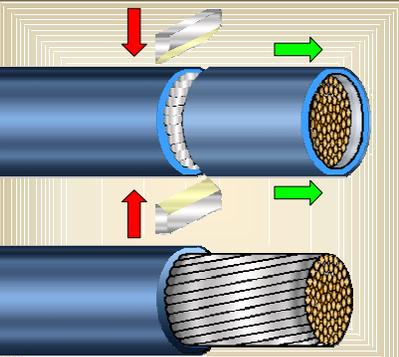


**WIRE PREPARATION
MECHANICAL STRIPPING**

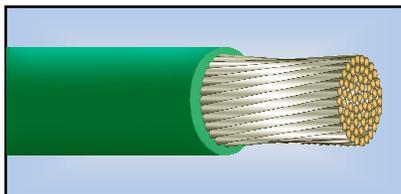


MECHANICAL STRIPPING

Mechanical stripping is an inexpensive, easy method of stripping most commonly used insulation materials, and is the preferred method for manually stripping film insulations such as Kapton®.

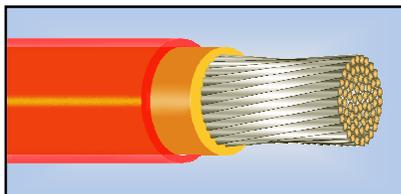
In the process, a grooved knife-edge is used to cut the insulation jacket down to the conductor. The severed insulation section is then manually removed without damaging the conductor.

See Section 1.01 "Wire Preparation, General Requirements", for common accept / reject criteria.



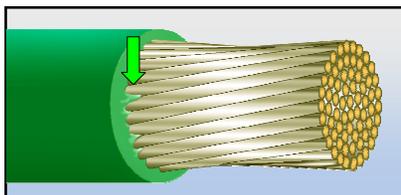
**PREFERRED
GENERAL REQUIREMENTS
(ALL CONDUCTOR / INSULATION TYPES)**

The insulation jacket has been neatly trimmed, with no edge flash and no mechanical damage to the conductor or insulation. Conductor stranding lay (twist pattern) exhibits a normal twist pattern (lay).



**PREFERRED
KAPTON® INSULATED CONDUCTORS**

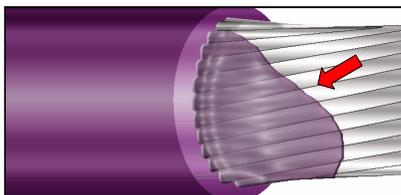
The insulation jacket has been trimmed neatly and squarely, with minimal edge flash and no mechanical damage to the conductor or insulation. Conductor stranding lay (twist pattern) is undisturbed.



**ACCEPTABLE
EDGE FLASH**

Edge flash shall not exceed one-quarter insulated wire diameter ($\frac{1}{4} d$). Edge flash is a thin layer of insulation that is produced during the stripping process, and is considered a contaminant.

[NASA-STD-8739.4 \[10.1.6 \]](#)



**UNACCEPTABLE
EXCESSIVE EDGE FLASH**

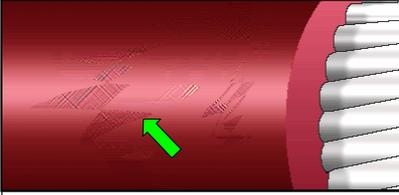
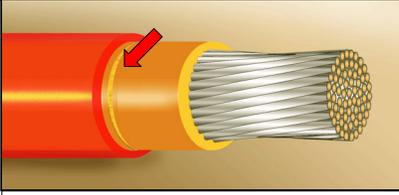
The edge flash is in excess of one-quarter insulated wire diameter ($\frac{1}{4} d$), and may interfere with the proper completion of a crimped or soldered termination.

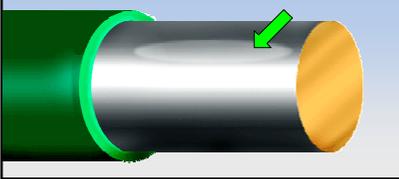
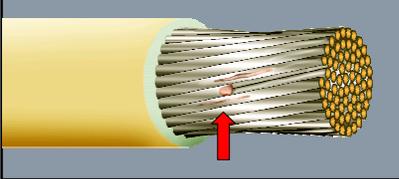
[NASA-STD-8739.4 \[10.1.6 \]](#)

NASA WORKMANSHIP STANDARDS

 <p>NATIONAL AERONAUTICS AND SPACE ADMINISTRATION</p> <p>JOHNSON SPACE CENTER HOUSTON, TEXAS USA 77058</p>	Released: 03.31.2000	Revision: B	Revision Date: 07.03.2002
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**WIRE PREPARATION
MECHANICAL STRIPPING (cont.)**

	
<p>ACCEPTABLE SCUFFED INSULATION / JACKET</p> <p>Slight scuffing (a dull or rubbed appearance) of the insulation surface finish is acceptable, provided no other damage is evident.</p> <p>NASA-STD-8739.3 [7.2.2] NASA-STD-8739.4 [10.1.2]</p>	<p>UNACCEPTABLE DAMAGED INSULATION / JACKET</p> <p>The conductor insulation and/or cable jacket shall not exhibit any damage, such as nicks, cuts, or charring. Conductors / jackets exhibiting damage (other than minor scuffing) shall not be used.</p> <p>NASA-STD-8739.3 [7.2.2], [13.6.2.a.1] NASA-STD-8739.4 [10.1.2], [19.6.2.a.1]</p>

	
<p>ACCEPTABLE SMOOTH TOOL IMPRESSION MARKS</p> <p>Smooth tool impression marks (slight cuts, nicks, scratches or scrapes) on the conductor surface, which do not expose base metal or reduce cross-sectional area, are acceptable.</p> <p>NASA-STD-8739.3 [7.2.3] NASA-STD-8739.4 [10.1.3]</p>	<p>UNACCEPTABLE DAMAGE TO CONDUCTORS</p> <p>Conductors that exhibit reduced cross-sectional area or exposed base metal shall be rejected.</p> <p>NASA-STD-8739.3 [7.2.3], [13.6.2.a.8] NASA-STD-8739.4 [10.1.3], [19.6.2.a.2]</p>

NASA WORKMANSHIP STANDARDS			
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